

**REMARKS UNDER 37 CFR § 1.111**

**Formal Matters**

Claims 1-57 are pending after entry of the amendments set forth herein.

Claims 1-51 were examined. Claims 1-6, 8-15, 18-25, 27-41, 43 and 45-51 were rejected.

Claims 7, 16, 17, 26, 42 and 44 were objected to, but indicated to contain allowable subject matter.

Applicant respectfully requests reconsideration of the application in view of the amendments and remarks made herein.

No new matter has been added.

**The Telephone Interview**

Applicant wishes to extend his appreciation to the Examiner for the courtesy provided to Applicant's representative during the telephone interview of February 21, 2007. During the Interview, it was agreed that amendment of the independent claims to recite in the body of the claims that the quality signals are selected geometrically independently of the locations of the pixels from which the signals originated, would overcome the current references used as bases for the rejections on art in this case. It was further agreed that amendment of claim 12 to change dependency from claim 10 to claim 11 would overcome the objection to claim 12. The Examiner required further revision of claim 14 to clarify the same.

This account is believed to be a complete and accurate summary of the interview as required by 37 C.F.R. § 1.133. If the Examiner believes that this summary is inaccurate or incomplete, Applicant respectfully request that the Examiner point out any deficiencies in his next communication so that Applicant can amend or supplement the interview summary.

**The Office Action**

In the Official Action of December 14, 2006, the specification was objected to as not including a

generic description of “Microsoft Excel” and as not capitalizing the same. In response thereto, Applicant has amended claim [0087] above to make the changes required by the Examiner.

The specification was further objected to as including an embedded hyperlink at paragraph [0091]. In response thereto, Applicant has amended claim 91 above to delete the hyperlink.

In view of the above amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw the objections to the specification as being no longer appropriate.

#### **Objection to Claim 12**

Claim 12 was objected to as lacking antecedent basis for “banding”. In response thereto, Applicant has amended claim 12 above to depend from claim 11, so as to provide proper antecedent basis for “banding”.

In view of the above amendment and remarks, the Examiner is respectfully requested to reconsider and withdraw the objection to claim 12 as being no longer appropriate.

#### **Claim 14 Rejected Under 35 U.S.C. Section 112, Second Paragraph**

Claim 14 was rejected under 35 U.S.C. Section 112, second paragraph as being indefinite. The Examiner indicated that it was unclear how the mean, median or standard deviation of a subset depends on its location (banding). In response thereto, claim 14 has been amended to depend from claim 10. Accordingly, it is respectfully submitted that claim 14 no longer claims that the recited diagnostics depend on the location of a subset.

In view of the above amendment and remarks, the Examiner is respectfully requested to reconsider and withdraw the rejection of claim 14 under 35 U.S.C. Section 112, second paragraph, as being indefinite, as being no longer appropriate.

#### **Claims Rejected Under 35 U.S.C. Section 102(b) (Chen et al.)**

Claims 1-5, 9, 15, 18-21, 23-25, 27, 29-34, 37, 41 and 45-50 were rejected under 35 U.S.C. Section 102(b) as being anticipated by Chen et al., U.S. Patent No. 6,245,517. The Examiner asserted that Chen et al. discloses a method for obtaining quality output signals from a chemical array image that includes the steps of rank ordering the output signals from the chemical array image according to signal

magnitude and identifying a subset of the rank ordered output signals that are representative of the quality signals.

Applicant respectfully submits that Chen et al. discloses a method of the type referred to in the present specification, page 5, paragraph [0014] as a “cookie cutter” type of method where a mask, template or “cookie” is positioned within each area of the microarray that is laid out to have a feature deposited or written thereon. Fig. 3 of Chen et al. shows the cookie used, which is referred to by Chen et al. as a “target mask”. Thus, only pixels within the target mask are considered by Chen et al. for feature signals.

Independent claim 1 has been amended above to further recite that locations of pixels in the image from which the identified quality signals are outputted can be located geometrically independently of a presumed feature location. Accordingly, a cookie cutter is not used to define a presumed feature location from which feature signals are identified. Support for this amendment can be found, for example, at paragraph [0080], pages 19-20 of the specification and throughout the specification. Claims 29 and 30 have been amended above to further recite that the subset of the high quality signals are identified geometrically independently of the locations from which the high quality signals originated. Support for these amendments can be found, for example, at paragraph [0080], pages 19-20 of the specification and throughout the specification. Claim 46 has been amended similarly to claim 1.

In view of the above amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1-5, 9, 15, 18-21, 23-25, 27, 29-34, 37, 41 and 45-50 under 35 U.S.C. Section 102(b) as being anticipated by Chen et al., U.S. Patent No. 6,245,517, as being inappropriate.

**Claims Rejected Under 35 U.S.C. Section 102(e) (Shams et al.)**

Claims 1-6, 8-12, 14, 18-25, 27-40, 43, 45 and 46-51 were rejected under 35 U.S.C. Section 102(e) as being anticipated by Shams et al., U.S. Patent No. 6,731,781. The Examiner asserted that Shams et al. discloses a method for obtaining quality output signals from a chemical array image that includes the steps of rank ordering the output signals from the chemical array image according to signal magnitude (column 15, lines 35-45 and Figs. 15A and B) and identifying a subset of the rank ordered output signals that are representative of the quality signals (column 16, lines 40-45).

Applicant respectfully submits that Shams et al. discloses a method of the type referred to in the

present specification, page 5, paragraph [0014] as a “cookie cutter” type of method where a mask, template or “cookie” is positioned within each area of the microarray that is laid out to have a feature deposited or written thereon. The abstract of Shams et al. discloses that the processor detects in each of the subgrids a center-representing pixel of a signal of a chemical material and an approximate radius of the signal. Further, Fig. 10, step 1000 and the description thereof describes the building of a circular template filter used for feature or spot finding. Figs. 11 and 12 also described the geometrically based methods of used of a circle template, spot center finding and spot radius finding. Column 15, lines 35-45, which were referred to by the Examiner, describe refining classification of pixels that have already been selected by outlining them with the circle, see column 15, lines 23-29. Accordingly, the only signals that can be classified as feature signals are those that are outputted from those pixels geometrically located within the circle.

Independent claim 1 has been amended above to further recite that locations of pixels in the image from which the identified quality signals are outputted can be located geometrically independently of a presumed feature location. Accordingly, a cookie cutter is not used to define a presumed feature location from which feature signals are identified. Support for this amendment can be found, for example, at paragraph [0080], pages 19-20 of the specification and throughout the specification. Claims 29 and 30 have been amended above to further recite that the subset of the high quality signals are identified geometrically independently of the locations from which the high quality signals originated. Support for these amendments can be found, for example, at paragraph [0080], pages 19-20 of the specification and throughout the specification. Claim 46 has been amended similarly to claim 1.

In view of the above amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1-6, 8-12, 14, 18-25, 27-40, 43, 45 and 46-51 under 35 U.S.C. Section 102(e) as being anticipated by Shams et al., U.S. Patent No. 6,731,781, as being inappropriate.

#### **Claims Indicated to Contain Allowable Subject Matter**

Claims 7, 13, 16-17, 26, 42 and 44 were indicated by the Examiner to contain allowable subject matter. Accordingly, Applicant has presented new claims 52-57 above to rewrite claims 7, 13, 16, 17, 26 and 44, respectively, into independent form to include the limitations of their respective base claims and any intervening claims. Accordingly, the Examiner is respectfully requested to indicate the

allowance of claims 52-57 in the next Official Action.

**Conclusion**

Applicant submits that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone the undersigned at the number provided.

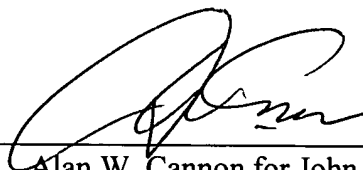
The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-1078, order number 10030524-1.

Respectfully submitted,

Date: \_\_\_\_\_

2/24/07

By: \_\_\_\_\_



Alan W. Cannon for John Brady  
Registration No. 34,977

John Brady  
Agilent Technologies, Inc.  
Legal Department, DL429  
Intellectual Property Administration  
P.O. Box 7599  
Loveland, CO 80537-0599  
Telephone: (408) 553-3584  
Facsimile: (408) 553-2365